

# ARC NEWS

OUR SIXTY SECOND YEAR

 Art Schultz W9BR  
 Editor

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 Publisher

Meeting: 2nd and 4th Fridays each Month.  
 U. C. Missions Bldg. Burnham Hall.  
 222 S. Downey Ave. 8:00 P. M.

Newsletter #7  
 May 1977

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 MEETING: May 13, 1977. Art Schultz, W9BR. will tell us ALL ABOUT ANT-ENNAS. Art will discuss all types of antennas, Long Wire, Dipoles, Quads, Yagi, ground plane etc. also matching networks and phasing methods. If you have any questions about antennas, this is the place to get an answer. Art will discuss, easy antennas for the novice.  
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Program Review--April 8, 1977. About 35 Members and guests heard Pete Ryza, WB9QWU, present a color movie from Western Electric covering the development of Electronic Speed Switching. The new system allows more flexibility in phone service. Most of this gear was developed at the Hawthorne Labs in Chicago. Switching now is done by Solid State devices, usually diodes which are caused to change resistance from an infinitely hi value, like an open switch, to a very low value, like in a Closed switch by application of a bias voltage thru suitable resistive paths so as not to short out the Audio of whatever signal is passing thru. This system totally eliminates the use of mechanical relay type switching. 5 of the Central Switching offices in Indianapolis already have this new equipment with all to follow soon. The equipment has a packing factor of 50% which means that only one half the space is needed for the same gear. Phone people go to school in Denver Colo. for training in the technology of this new system. Thanks Pete for a most interesting presentation.

Program review April 22, 1977. 47 members and guests enjoyed a outstanding program on freq synthesizers by Ron Wright, WB9TOG, Electrical engineer on the staff of U. S. Naval Facility, Indy. A Freq Syn, basically produces operating freqs which have crystal stability but are easily selected by switching, all done from one crystal. The key to the FS circuit is a Divide by N circuit which does our channel selection, the second important circuit is the VCO, Voltage Controlled Osc. which has a Varactor diode in a free running oscillator circuit. Next is the Crystal Osc. which sets there producing One Freq all the time, This freq is our stable reference source and by means of the total circuit called a PLL or Phase Locked Loop, keeps our VCO on Frequency. Currently, one can purchase a single chip which does all these bits of magic, giving frequencies say on 2 meters of 10 KHZ increments. THANKS Ron for a EXCELLENT PROGRAM

CLUB PROMOTION 25 invitations have been sent to new hams residing in the area near our Clubrooms in order to get acquainted and develop an interest in a membership in our club. In addition to these, a promotional visit was made to the Red Cross club where all the members of the Radio Class were invited to attend the May 13th meeting. as an incentive, a coupon is attached to the invitation which the guest brings in to compete for a valuable prize, probably a volt-ohmmeter. Members will abstain from this drawing. the program for that night will be slanted in part to the interests of a neophyte. This type of promotion will be repeated, should it prove effective. PLEASE introduce yourselves to our guests and really turn on the WELCOME SIGN and HOSPITALITY and encourage their membership.



NEW MEMBERS Our ranks have recently been swelled by several new members who are being presented to the membership by way of this short introduction

THOMAS E. MULLENDORE WB4WAV, last previous call, Tom is retired from 22 years with the Govt. in the Diplomatic Telecommunications Service where he operated and managed electronic equipment in a number of parts of the world. He operated from many of these places with such exotic calls as, TIY2, San Jose, Costa Rica. HK3X Honduras, AEB30 Germany, AEZ7 and ET3USA at Asmara Ethiopia KRN50 England and KKN50 in the states. Tom is a native from Indpls spending some time as Sparks in the U.S. Navy with Radioman-2 rating. He is boneing up on his theory getting ready to take the FCC test on April 25th. He is planning to build his own gear and operate mostly lower band CW. He got his first ham ticket in 1969. Tom lives at 5763 E. New York St. and is retired, Phone is 353-9029.

JAMES D. RINEHART Jim Holds the General class ticket licensed since 1968 He likes CW and operates the Drake Twins on the lower bands using an Inverted Vee on 80 and 40 with good results. He has built a Heath Squeeze Keyer and is also doing some operating on 2 meter FM. Jim is also a member of the Blue River Valley Radio Club at Shelbyville. He is originally from Franklin, Ind. and is employed at Eli Lilly where he is in charge of the packing department. As a novice, he held the call WN9ART, He lives at 6840 S. Arlington Ave. Phone 787-2752.

HENRY M. PETERSON, W9ZRK Henry has the General Class Ticket and licensed since 1953. His present operation is limited to 2 meters FM operating a Kenwood 7400 both mobile and fixed station. He became acquainted with our Club thru the good work of one of our oldest members, Ralph Mays. Henry is retired from being Supervisor of Electrical maintenance at the WE. Shadeland Plant. He has a son, Mel, WA9ZXS active mostly in the CAP. Henry loves to get away from it all as an avid fisherman. He lives at 4423 Longworth St. Lawrence, Ind. Phone 546 9385.

KENNETH B. ALEXANDER, WB9VGS, Ken holds the Advanced Class ticket since March 1958. He comes to us from Detroit, being transferred here by Western Electric where he is Operations Supervisor in the AT&T Long Lines Div. He operates the Heath line, SB-401, SB303 Recvr. and has a hidden dipole folded up in his attic, which he tunes up with a homebrew transmatch. He has one son age 26 not licensed. Ken has a second hobby PHOTOGRAPHY.

TOM WOOLUMS Tom has a Student Membership being very busy at IUPUI working on his engineering degree. He got on the air March 1, 1977 and holds the Novice class ticket. He operates Heath gear when he can spare the time from his school work and his job. Tom has a younger brother, Mike who is getting ready for the FCC test in May. Tom Lives at 6848 Buick Drive, Indy Phone # 241-5039.

It is our wish that you all enjoy your membership, the meetings, activities, Club Paper and that you will participate in attendance and all our manifold club activities. Congratulations on making this important step to build better Amateur Radio in INDY.

Our Pres. Mike Williams had the pleasure of sharing a banquet table at the Dayton Hamfest with a couple of old Hoosier Hams, THE LOUGHMILLERS (Doug and Deane). Mike says they have been converted 100% from Hoosier to Texans even down to the spoken language Hi.